

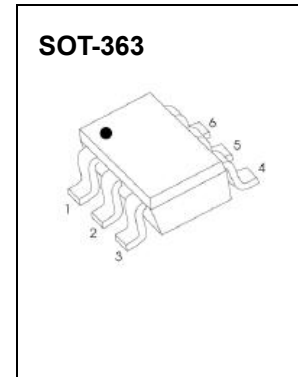


Plastic-Encapsulate Diodes

Switching Diode

FEATURES

- Fast Switching Speed
- Ultra-Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance Power Dissipation



MMBD4448HAEW	MMBD4448HADW	MMBD4448HCDW	MMBD4448HSDW	MMBD4448HTW
MARKING:KA5	MARKING:KA6	MARKING:KA7	MARKING:KAB	MARKING:KAA

Solid dot = Pin1 indicate.

Solid dot = Green molding compound device, if none, the normal device.

Maximum Ratings and Electrical Characteristics, Single Diode @T_a=25 °C

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V _{RRM}		
Working Peak Reverse Voltage	V _{RWM}	80	V
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	57	V
Forward Continuous Current	I _{FM}	500	mA
Average Rectified Output Current	I _O	250	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	2.0	A
Power Dissipation	P _d	200	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	625	°C/W
Storage Temperature	T _{STG}	-55 ~+150	°C



ELECTRICAL CHARACTERISTICS

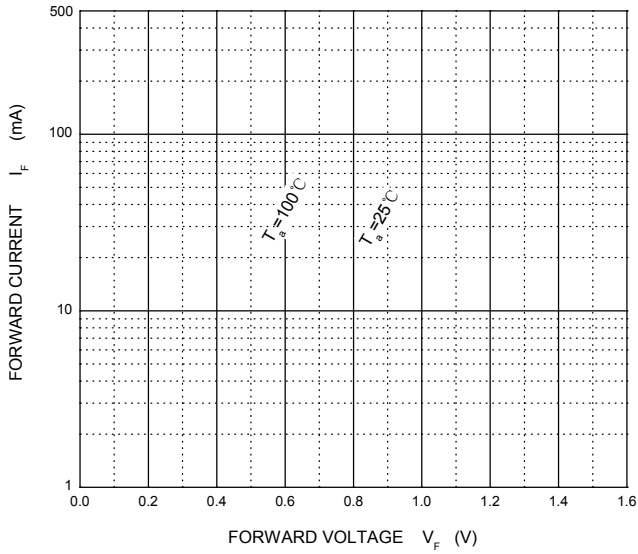
Electrical Ratings @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	80			V	$I_R=100\mu A$
Forward Voltage	V_{F1}	0.62		0.72	V	$I_F=5mA$
	V_{F2}			0.855	V	$I_F=10mA$
	V_{F3}			1.0	V	$I_F=100mA$
	V_{F4}			1.25	V	$I_F=150mA$
Reverse Current	I_{R1}			100	nA	$V_R=70V$
	I_{R2}			25	nA	$V_R=20V$
Capacitance Between Terminals	C_T			3.5	pF	$V_R=0V, f=1MHz$
Reverse Recovery Time	t_{rr}			4	ns	$I_F=I_R=10mA$ $I_{rr}=0.1I_R, R_L=100\Omega$

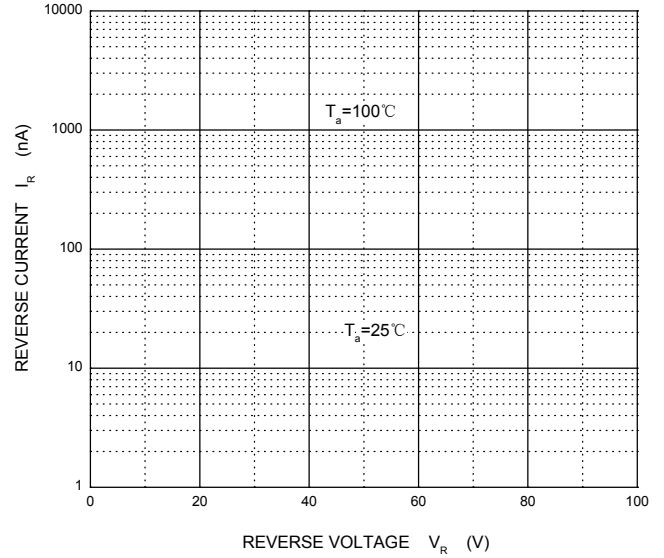


Typical Characteristics

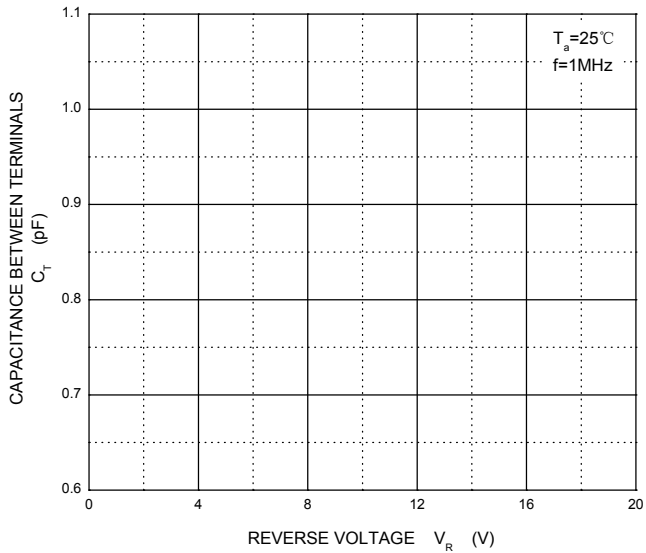
Forward Characteristics



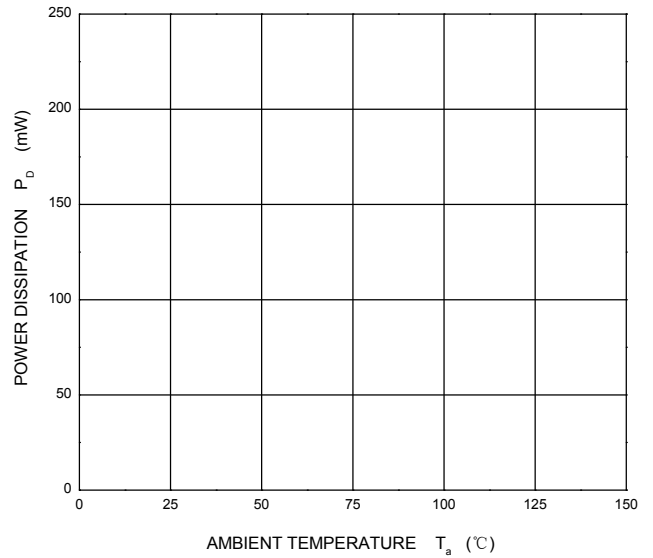
Reverse Characteristics



Capacitance Characteristics

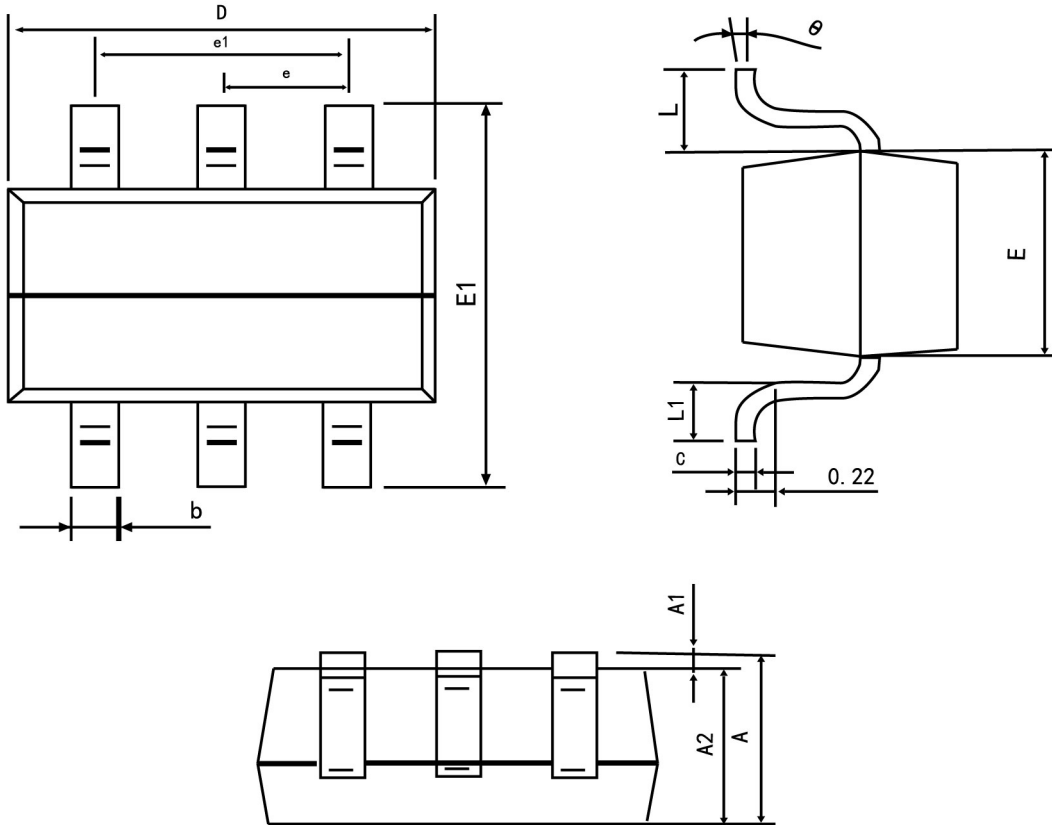


Power Derating Curve





SOT-363-Package Outline Dimensions



Symbol	Dimension in Millimeters	
	Min	Max
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
c	0.080	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.450
e	0.650 TYP	
e1	1.200	1.400
L	0.525 REF	
L1	0.260	0.460
theta	0°	8°